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Contaminant Found in Field Lab's Ground Water

■ **Rocketdyne:** Despite the high levels, regulators say it's difficult to determine how serious a risk is posed. Chemical was once used in rocket fuel production.

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SIMI VALLEY—High levels of a contaminant that can cause thyroid damage have been found in the ground water at Rocketdyne's Santa Susana Field Laboratory, but regulators say it is difficult to assess how serious a risk the chemical poses.

The contaminant—ammonium perchlorate—is an explosive chemical once used in the production of solid rocket fuel. It is not believed to be a cancer-causing agent—as is trichloroethylene, also found in the field lab's wells—but it can weaken the thyroid, thus leading to other illnesses.

The contaminant, once used to treat over-active thyroids, is little studied, so its exact effects on human health and the environment are not yet known, regulators say. But it does migrate through the ground faster than trichloroethylene—or TCE—and is harder to clean up.

"I wouldn't expect the extent [of ammonium perchlorate contamination] to approximate the extent of TCE contamination," said Tom Kelly, a federal Environmental Protection Agency manager who oversees the cleanup of the field lab, the site of decades of

nuclear and rocket research.

"That doesn't mean it still couldn't be a big problem—depending on how far it's migrating," Kelly said. "It's a potential concern that they're going to need to investigate more."

No one drinks the water at the 2,868-acre field laboratory just outside Simi Valley. But neighbors in surrounding communities have long feared that it seeps down "the Hill," tainting their well water and causing illness.

Their concerns were heightened by a UCLA study of nuclear radiation released last year that found some Rocketdyne employees have higher-than-expected cancer death rates. A draft of a second study—looking at exposure to chemicals—could be ready later this year.

Testing results do not support those fears, said Ron Baker, a spokesman at the state Department of Toxic Substances Control.

In testing of 40 ground-water wells at the field lab between August and November, overseen by the state Department of Toxic Substances Control, four wells in one area consistently showed high levels of ammonium perchlorate.

But none of the wells on the perimeter of the field laboratory showed the contamination, Baker said.

"We have no evidence that would place this contaminant off-site," he said. "To us that means that there are no public drinking water supplies that are in danger of being contaminated or threatened at this time. It's just not there. It is on the site. It is not moving off the site."

Neither state nor federal regulators have set final guidelines on how much ammonium

perchlorate is acceptable in ground water, but the state considers levels above 18 parts per billion worthy of action. The four problem wells—near an area where propellants were once handled—range from 96 to 710 parts per billion.

As part of a multimillion-dollar cleanup effort, Rocketdyne had been pumping water laced with TCE out of the ground and treating it to remove the contaminants.

But previous "pump and treat" methods—such as those used at Sacramento's Aerojet—have proved ineffective for ammonium perchlorate.

"At this point, there isn't even any decision as to what ways you can treat it or clean it up," Rocketdyne spokesman Dan Beck said. "There's not the technology available for this. It probably won't be until late fall when we get guidance as to how to proceed with the cleanup."

Regulators and Rocketdyne critics agreed that ammonium perchlorate is probably not the most serious of the field lab's contamination problems.

Monitoring of ammonium perchlorate has only become a concern in California in recent years, regulators said, with the Aerojet contamination in Sacramento and the appearance of the contaminant in the Colorado River.

Early last year the state Department of Health Services refined the process for measuring ammonium perchlorate levels from 400 to four parts per billion, Kelly said.

The perchlorate contamination will be discussed at a meeting Wednesday of the Santa Susana Field Lab Workgroup, a gathering of parties concerned about the site.